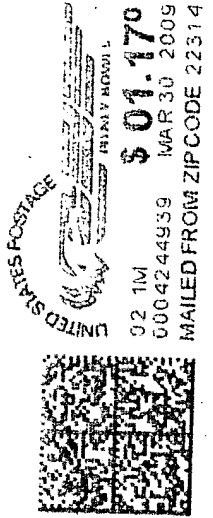


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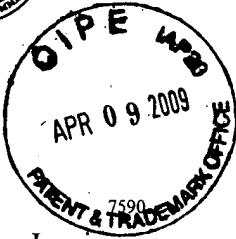
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## NOTICE OF ALLOWANCE AND FEE(S) DUE

03/30/2009

Sandeep Jaggi  
LSI Logic Corporation  
Intellectual Property Law Department  
1551 McCarthy Blvd., M/S D-106  
Milpitas, CA 95035

EXAMINER

PRICE, NATHAN E

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 03/30/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,581

07/15/2003

Ekambaram Balaji

030773/2868P

8889

TITLE OF INVENTION: FLEXIBLE ARCHITECTURE COMPONENT (FAC) FOR EFFICIENT DATA INTEGRATION AND INFORMATION INTERCHANGE USING WEB SERVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

**PART B - FEE(S) TRANSMITTAL**

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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 03/30/2009

Sandeep Jaggi  
LSI Logic Corporation  
Intellectual Property Law Department  
1551 McCarthy Blvd., M/S D-106  
Milpitas, CA 95035

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**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,581	07/15/2003	Ekambaram Balaji	030773/2868P	8889

**TITLE OF INVENTION:** FLEXIBLE ARCHITECTURE COMPONENT (FAC) FOR EFFICIENT DATA INTEGRATION AND INFORMATION INTERCHANGE USING WEB SERVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
PRICE, NATHAN E	2194	719-313000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,581	07/15/2003	Ekambaram Balaji	030773/2868P	8889

7590 03/30/2009

Sandeep Jaggi  
LSI Logic Corporation  
Intellectual Property Law Department  
1551 McCarthy Blvd., M/S D-106  
Milpitas, CA 95035

EXAMINER

PRICE, NATHAN E

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 03/30/2009

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 702 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 702 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

**Notice of Allowability**

Application No.

10/620,581

Applicant(s)

BALAJI ET AL.

Examiner

NATHAN PRICE

Art Unit

2194

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications received 08 January 200 and interview summary9.
2. ☒ The allowed claim(s) is/are 3,6,7,9,15,18,19,21,27-28 and 31-33 renumbered 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20090313</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                    |
|  | 9. <input type="checkbox"/> Other _____  |

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephen G. Sullivan (Reg. No. 38329) on 12 March 2009.

The claims have been amended as follows:

31. A method for providing data integration and exchange between a plurality of client applications over a network, wherein each of the client applications access a respective data source, the method comprising:

(a) providing an adapter AP at each of the client applications that provides a first set of methods for the client applications to use to translate data in the respective data sources into XML format, wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format;

(b) modifying each of the client applications to invoke the first set of methods in the adapter API to convert the data in the respective data sources into XML format

Art Unit: 2194

according to a registered schema definition and saving the XML format data from the respective data sources in XML files;

(c) submitting each of the XML files to an import repository at a server, wherein the import repository is separate from a database at the server;

(d) prior to storing data from the XML files in a database, validating each of the XML files in the import repository against a document type definition (DTD) corresponding to the respective data sources;

(e) parsing the validated XML files in the import repository and storing name/value pairs in a database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications; and

(f) including a second set of methods in the adapter API for the client applications that provides consumption logic and methods for automatically exporting data defined in a Web-based schema registry, from the database into the client applications using Web services.

32. A computer-readable medium containing program instructions for providing data integration and exchange between a plurality of client applications over a network, wherein each of the client applications access a respective data source, the program instructions for:

(a) providing an adapter API at each of the client applications that provides a first set of methods for the client applications to use to translate data in the respective data

Art Unit: 2194

sources into XML format, wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format;

(b) modifying each of the client applications to invoke the first set of methods in the adapter API to convert the data in the respective data sources into XML format according to a registered schema definition and saving the XML format data from the respective data sources in an XML file;

(c) submitting each of the XML files from the client applications to an import repository at a server, wherein the import repository is separate from a database at the server;

(d) prior to storing data from the XML files in a database, validating each of the XML files in the import repository against a document type definition (DTD) corresponding to the respective data sources;

(e) parsing the validated XML files in the import repository and storing name/value pairs in a database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications; and

(f) including a second set of methods in the adapter API for the client applications that provides consumption logic and methods for automatically exporting data defined in a Web-based schema registry, from the database into the client applications using Web services.



33. A data integration system, comprising:

a network;

a server coupled to the network, the server including a schema registry, an import repository, an XML loader, a database, and a published adapter API at each of the client applications that provides a first set of methods for translating data in respective data source into XML format; and

a plurality of client applications coupled to the network and in communication with the server, wherein each of the client applications access the respective data source, and wherein the data sources of each of the client applications store different types of data in different formats, wherein the data from a given data source is not directly accessible by the other client applications that utilize data of a different type or format, and

wherein at least a portion of the client applications includes a corresponding schema definition and document type definition (DTD) registered with the schema registry, and the portion of the client applications includes generation logic for making calls to the first set of methods in the adapter API, such that data in the respective data sources are converted into XML format according to the corresponding schema definition and stored in XML files,

wherein each of the XML files is submitted to the import repository at the server, wherein the import repository is separate from a database at the server, wherein each of the XML files in the import repository is validated against the corresponding DTD

Art Unit: 2194

prior to storing data from the XML files in a database, and wherein the XML loader parses the validated XML files in the import reposition and stores name/value pairs in the database at the server according to a hierarchy specified by the corresponding DTD, thereby standardizing the data from the data sources of the client applications;

wherein the adapter API further includes a second set of methods for the client applications that that provides consumption logic and methods for automatically exporting data defined in the schema registry, from the database into the client applications using Web services.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN PRICE whose telephone number is (571)272-4196. The examiner can normally be reached on 8:30am - 5:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2194

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

NP

<b>Examiner-Initiated Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/620,581	BALAJI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	NATHAN PRICE	2194	

**All Participants:**

(1) Stephen G. Sullivan (Reg. No. 38329).

(2) NATHAN PRICE.

**Date of Interview:** 12 March 2009

**Type of Interview:**  
☒ Telephonic  
☐ Video Conference  
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

**Exhibit Shown or Demonstrated:** ☐ Yes ☒ No  
 If Yes, provide a brief description:

**Part I.**  
 Rejection(s) discussed:  
*none*

Claims discussed:  
 2, 14, 26, 31, 32 and 33.

Prior art documents discussed:  
*none*

**Part II.**  
 SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:  
*Applicant's representative approved an Examiner's amendment to combine claims 31 with 2, 32 with 14 and 33 with 26 to make the case allowable.*

**Part III.**  
☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.  
☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

**Status of Application:** \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

**Time:** \_\_\_\_\_

/Meng-Ai An/  
 Supervisory Patent Examiner, Art Unit 2195

(Applicant/Applicant's Representative Signature – if appropriate)